



SEQUENCE LISTING

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Lambright, David

<120> LIPID BINDING MOLECULES AND METHODS OF
USE

<130> 07917-171001

<140> US 10/634,679
<141> 2003-08-04

<150> US 60/400,619
<151> 2002-08-02

<160> 23

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 60
<212> PRT
<213> Artificial Sequence

<220>
<223> Lipid binding domain

<221> VARIANT
<222> 2, 3, 5-9, 11-12, 14-17, 30-33, 35-36, 38-47, 51, 57-58, 60
<223> Xaa = any amino acid

<221> VARIANT
<222> 18
<223> Xaa = Ala or Thr

<221> VARIANT
<222> 19, 20, 48-50, 52-53
<223> Xaa = u = a highly hydrophobic residue such as
Phe, Val, Ile, Leu, Met, Trp, Tyr, or Thr

<221> VARIANT
<222> 21
<223> Xaa = j = a positively charged residue such as Arg
or Lys

<221> VARIANT
<222> 22, 23
<223> Xaa = Arg or Lys

<221> VARIANT
<222> (28)...(0)
<223> Xaa = Ala, Gly or Val

<400> 1

```

Trp Xaa Xaa Asp Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa
 1           5           10           15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa His His Cys Arg Xaa Cys Xaa Xaa Xaa
 20           25           30
Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35           40           45
Xaa Xaa Xaa Xaa Xaa Arg Val Cys Xaa Xaa Cys Xaa
 50           55           60

```

```

<210> 2
<211> 66
<212> PRT
<213> Homo sapiens

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```

<400> 2
Leu Asn Arg Lys Trp Ala Glu Asp Asn Glu Val Gln Asn Cys Met Ala
 1           5           10           15
Cys Gly Lys Gly Phe Ser Val Thr Val Arg Arg His His Cys Arg Gln
 20           25           30
Cys Gly Asn Ile Phe Cys Ala Glu Cys Ser Ala Lys Asn Ala Leu Thr
 35           40           45
Pro Ser Ser Lys Lys Pro Val Arg Val Cys Asp Ala Cys Phe Asn Asp
 50           55           60
Leu Gln
65

```

```

<210> 3
<211> 65
<212> PRT
<213> Mus musculus

```

```

<400> 3
Arg Ala Pro Asp Trp Val Asp Ala Glu Glu Cys His Arg Cys Arg Val
 1           5           10           15
Gln Phe Gly Val Val Thr Arg Lys His His Cys Arg Ala Cys Gly Gln
 20           25           30
Ile Phe Cys Gly Lys Cys Ser Ser Lys Tyr Ser Thr Ile Pro Lys Phe
 35           40           45
Gly Ile Glu Lys Glu Val Arg Val Cys Glu Pro Cys Tyr Glu Gln Leu
 50           55           60
Asn
65

```

```

<210> 4
<211> 67
<212> PRT
<213> Homo sapiens

```

```

<400> 4
Val Ala Pro Val Trp Val Pro Asp Ser Gln Ala Pro Asn Cys Met Lys
 1           5           10           15
Cys Glu Ala Arg Phe Thr Phe Thr Lys Arg Arg His His Cys Arg Ala
 20           25           30
Cys Gly Lys Val Phe Cys Ala Ser Cys Cys Ser Leu Lys Cys Lys Leu
 35           40           45
Leu Tyr Met Asp Arg Lys Glu Ala Arg Val Cys Val Ile Cys His Ser
 50           55           60

```

Val Leu Met
65

<210> 5
<211> 64
<212> PRT
<213> Homo sapiens

<400> 5
Ser Val Val Pro Trp Val Asn Asp Gln Asp Val Pro Phe Cys Pro Asp
1 5 10 15
Cys Gly Asn Lys Phe Ser Ile Arg Asn Arg Arg His His Cys Arg Leu
20 25 30
Cys Gly Ser Ile Met Cys Lys Lys Cys Met Glu Leu Ile Ser Leu Pro
35 40 45
Asp Asp Asp Arg Ile Arg Cys Cys Thr His Cys Lys Asp Thr Leu Leu
50 55 60

<210> 6
<211> 68
<212> PRT
<213> Rattus norvegicus

<400> 6
Arg Ala Pro Arg Trp Ile Arg Asp Asn Glu Val Thr Met Cys Met Lys
1 5 10 15
Cys Lys Glu Ser Phe Asn Ala Leu Thr Arg Arg Arg His His Cys Arg
20 25 30
Ala Cys Gly His Val Val Cys Trp Lys Cys Ser Asp Tyr Lys Ala Gln
35 40 45
Leu Glu Tyr Asp Gly Gly Arg Leu Asn Lys Val Cys Lys Asp Cys Tyr
50 55 60
Gln Ile Met Ser
65

<210> 7
<211> 68
<212> PRT
<213> Homo sapiens

<400> 7
Arg Ala Pro Thr Pro Ile Arg Glu Lys Glu Val Thr Met Cys Met Arg
1 5 10 15
Cys Gln Glu Pro Phe Asn Ser Ile Thr Lys Arg Arg His His Cys Lys
20 25 30
Ala Cys Gly His Val Val Cys Gly Lys Cys Ser Glu Phe Arg Ala Arg
35 40 45
Leu Val Tyr Asp Asn Asn Arg Ser Asn Arg Val Cys Thr Asp Cys Tyr
50 55 60
Val Ala Leu His
65

<210> 8
<211> 14
<212> PRT
<213> Homo sapiens

<400> 8

Cys Glu Ala Arg Phe Thr Phe Thr Lys Arg Arg His His Ser
1 5 10

<210> 9

<211> 14

<212> PRT

<213> Homo sapiens

<400> 9

Cys Glu Ala Arg Phe Ser Val Thr Val Arg Arg His His Cys
1 5 10

<210> 10

<211> 59

<212> PRT

<213> Homo sapiens

<400> 10

Trp	Val	Pro	Asp	Ser	Gln	Ala	Pro	Asn	Cys	Met	Lys	Cys	Glu	Ala	Arg
1				5					10					15	
Phe	Thr	Phe	Thr	Lys	Arg	Arg	His	His	Cys	Arg	Ala	Cys	Gly	Lys	Val
			20				25						30		
Phe	Cys	Ala	Ser	Cys	Cys	Ser	Leu	Lys	Cys	Lys	Leu	Leu	Tyr	Met	Asp
	35						40				45				
Arg	Lys	Glu	Ala	Arg	Val	Cys	Val	Ile	Cys	His					
	50					55									

<210> 11

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Motif

<221> VARIANT

<222> 2, 3

<223> Xaa = any amino acid

<400> 11

Trp Xaa Xaa Asp
1

<210> 12

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Motif

<221> VARIANT

<222> 1, 2

<223> Xaa = Arg or Lys

<400> 12

Xaa Xaa His His Cys Arg
 1 5

<210> 13
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Motif

<221> VARIANT
 <222> 1
 <223> Xaa = Ala, Thr or Ser

<221> VARIANT
 <222> 2, 3
 <223> Xaa = u = a highly hydrophobic residue such as
 Phe, Val, Ile, Leu, Met, Trp, Tyr or Thr

<221> VARIANT
 <222> 4
 <223> Xaa = j = a positively charged residue such as Arg
 or Lys

<400> 13
 Xaa Xaa Xaa Xaa
 1

<210> 14
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Example of useful Turret loop

<400> 14
 Ala Phe Phe Arg
 1

<210> 15
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Example of useful Turret loop

<400> 15
 Ala Phe Ile Arg
 1

<210> 16
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Example of useful Turret loop

<400> 16
 Ala Ile Phe Arg
 1

<210> 17
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Example of useful Turret loop

<400> 17
 Ala Phe Phe Lys
 1

<210> 18
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Example of useful Turret loop

<400> 18
 Ala Phe Ile Lys
 1

<210> 19
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Example of useful Turret loop

<400> 19
 Ala Ile Phe Lys
 1

<210> 20
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Example of useful Turret loop

<400> 20
 Thr Phe Thr Lys
 1

<210> 21

<211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Specific example

<400> 21
 Gly Leu Ser Ala Leu
 1 5

<210> 22
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 22
 Trp Ala Glu Asp Asn Glu Val Gln Asn Cys Met Ala Cys Gly Lys Gly
 1 5 10 15
 Phe Ser Val Thr Val Arg Arg His His Cys Arg Gln Cys Gly Asn Ile
 20 25 30
 Phe Cys Ala Glu Cys Ser Ala Lys Asn Ala Leu Thr Pro Ser Ser Lys
 35 40 45
 Lys Pro Val Arg Val Cys
 50

<210> 23
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 23
 Trp Val Pro Asp Ser Gln Ala Pro Asn Cys Met Lys Cys Glu Ala Arg
 1 5 10 15
 Phe Thr Phe Thr Lys Arg Arg His His Cys Arg Ala Cys Gly Lys Val
 20 25 30
 Phe Cys Ala Ser Cys Cys Ser Leu Lys Cys Lys Leu Leu Tyr Met Asp
 35 40 45
 Arg Lys Glu Ala Arg Val Cys
 50 55